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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,382

03/11/2004

Wing Yu Leung

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EXAMINER

TORRES, JOSEPH D

ART UNIT

PAPER NUMBER

2112

MAIL DATE

DELIVERY MODE

06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/800,382	Applicant(s) LEUNG ET AL.	
	Examiner Joseph D. Torres	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 5-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 5-11 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 5 and 6 are directed to generating and distributing EDC code among data bytes in a packet and generating syndrome bits properly classified in 714/785 whereas claims 1-4 are properly classified in 714/769.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 5-11 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Specification

2. The Abstract was received on 05/07/2007. The Abstract is accepted.

Response to Arguments

Applicant's arguments filed 05/07/2007 have been fully considered but they are not persuasive.

The Applicant contends, "However, Ragle teaches that this conversion is required to provide no more than two adjacent zeros", and to "never [have] more than one zero

leading or ending a code". (Ragle, Col. 4, lines 15-23.) Fig. 2 of Ragle illustrates the conversion of an 8-bit by 9-bit matrix (which includes parity bits P and error check character E) to a 10-bit by 9-bit matrix (which includes generic bits X). By teaching that this conversion is necessary, Ragle explicitly teaches away from storing the parity bits P and the error check character E on the tape 102. Ragle therefore fails to teach "storing said data portion and said EDC code portion of each byte of the packet in the memory module" as recited by amended Claim 1. Because Ragle fails to teach 'storing said data portion and said EDC code portion of each byte of the packet in the memory module" as recited by amended Claim i, Ragle also necessarily fails to teach "reading out said data portion and said EDC code portion of each byte of the packet from said memory module" as recited by amended Claim 1".

The Examiner disagrees and asserts that encoder 110 in Figure 1 of Ragle is a modulation encoder for providing the entire matrix 108 including parity and check bits to Tape 102. Decoder 122 recovers the modulated data, parity and check bits that were stored on Tape 102. If the parity and check bits were not stored on tape 102, it would be impossible for demodulation decoder 122 to recover parity and check bits. In other words Modulation Encoder 110 in Figure 1 of Ragle provides an invertible transform T for generating a recording storage block T(data, parity, check) that is an explicit representation of the Data, Parity and Check block 108 in Figure 1 of Ragle for the purposes of enabling self-clocking and avoiding loss of signal strength. Since the transform T is invertible the recording storage block T(data, parity, check) is substantially identical to the Data, Parity and Check block 108 in Figure 1 of Ragle.

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That is, the recording storage block T(data, parity, check) is Data, Parity and Check block 108 in Figure 1 of Ragle and recording storage block T(data, parity, check) is a recording storage block storing Data, Parity and Check block 108 in Figure 1 of Ragle on tape 102.

The Examiner disagrees with the applicant and maintains all rejections of claims 1-4. All amendments and arguments by the applicant have been considered. It is the Examiner's conclusion that claims 1-4 are not patentably distinct or non-obvious over the prior art of record in view of the references, Ragle; Herbert U. (US 4052698 A) in view of Brune; Werner et al. (US 3665393 A, hereafter referred to as Brune) as applied in the last office action, filed 11/07/2006. Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ragle; Herbert U. (US 4052698 A).

See the Final Action filed 11/07/2006 for detailed action of prior rejections.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness:

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ragle; Herbert U. (US 4052698 A) in view of Brune; Werner et al. (US 3665393 A, hereafter referred to as Brune).

See the Final Action filed 11/07/2006 for detailed action of prior rejections.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ragle; Herbert U. (US 4052698 A).

See the Final Action filed 11/07/2006 for detailed action of prior rejections.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph D. Torres, PhD
Primary Examiner
Art Unit 2112



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